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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/215,194 12/18/98 IKEGAMI

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005514 TM02/0717  
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EXAMINER

NGUYEN, T

ART UNIT

PAPER NUMBER

2182

DATE MAILED:

07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/215,194

Applicant(s)

IKEGAMI ET AL.

Examiner

Tanh Q. Nguyen

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2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-28 were originally presented for examination on 12/18/98. Claims 1-14 were cancelled and claims 15-28 were amended by amendment received 05/11/01. Claims 15-28 remain pending.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 17 and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification either discloses the rewrite execution codes being transferred to a volatile memory medium and stored therein, or the rewrite execution codes being transferred to the first memory medium and stored therein. The specification does not disclose the rewrite execution codes being transferred to the first memory medium and stored therein, with the first memory medium being a volatile memory, especially when the transfer is from the second memory medium.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-17, 19, 21; 22-24, 26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata et al. (U. S. Pat. No. 5,787,288)**.

6. As per claim 15, **Nagata et al.** (Nagata) teaches an image forming apparatus [10, FIG. 8] comprising:

a first memory medium [3, FIG. 8] for storing control codes (col. 4, lines 56-58);

a display means [6, FIG. 8] for displaying messages associated with image forming operations (col. 4, lines 66-67);

a receive means [2, FIG. 8] for receiving data (col. 4, lines 54-56) from an external apparatus [9, FIG. 8];

a second memory medium [4, FIG. 8] for storing the data received by the receive means (col. 4, lines 58-62)

a rewrite means (col. 5, lines 8-11) for rewriting control codes stored in the first memory medium;

wherein, when a determination is made that a renewal of control codes is requested (col. 6, lines 17-24; col. 6, lines 51-54; col. 8, lines 57-59), the receive means receives both rewrite execution codes and control codes from the external apparatus (col. 2, line 63-col. 3, line 3; col. 8, lines 41-48), with both the rewrite execution codes and the control codes being stored in the second memory medium (col. 9, lines 13-16), and the rewrite means rewrites the control codes in the first memory medium with the control codes in the second memory medium in accordance with the rewrite execution codes (col. 6, lines 40-41; col. 7, lines 44-46).

Nagata does not specifically teach the display means displaying a message informing the fact that the image forming apparatus is under download of data into the second memory medium.

Nagata, however, teaches an electromagnetic lock mechanism [52, FIG. 8] locking a power switch [51, FIG. 8] to maintain the image forming apparatus in a power on state (col. 5, lines 12-25) while control codes are being renewed (col. 8, line 55-col. 9, line 9), and as early as when a request is issued for renewal of control codes (col. 9, lines 9-12) to allow the renewal process to be completed safely (col. 3, lines 52-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made that Nagata teaches prevention of accidental powering off of the image forming apparatus during the renewal of control codes; and since the download of data occurs after a request is issued for renewal codes, also teaches download of data into the second memory medium being part of the renewal of control codes process.

Nagata further teaches other means for ensuring that the image forming apparatus remains powered on during renewal of control codes, including the display means being used instead of the lock mechanism to alert the fact that the control codes are being renewed (col. 5, lines 25-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made that the use of the display means to alert the fact that the control codes are being renewed would help prevent a user from accidentally powering off the image forming apparatus during the renewal process by making the current use of the information apparatus visible and recognizable to the user. Nagata, therefore, teaches the display means displaying a message informing the fact that the image forming apparatus is under download of data into the second memory medium.

7. As per claims 16-17, 19, 21, Nagata teaches the rewrite execution codes being transferred to a non-volatile memory medium [3, FIG. 8] as the first memory medium and stored therein (col. 9, lines 14-16); the rewrite execution codes being transferred to a volatile memory medium [4, FIG. 8] and stored therein (col. 9, lines 14-16); an image forming control means for controlling an image forming process, and a switching means for exclusively changing over between the image forming process and the rewriting of the control codes (col. 5, lines 5-11; col. 6, lines 17-24); and the switching means exclusively changing over in accordance with a predetermined command [NSS signal] transmitted from the external apparatus (col. 6, lines 51-54).

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8. As per claims 22-24, 26 and 28, Nagata teaches an image forming apparatus and rewriting of control codes in such an apparatus (see rejections to claims 15-17, 19 and 21 in paragraphs 5-7 above), therefore teaches the rewrite control method for such an apparatus.

9. Claims 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Whitley et al. (U. S. Pat. No. 5,590,373)** in view of **Nagata**.

10. As per claim 15, **Whitley et al.** (Whitley) teaches a device [100, FIG. 1] comprising:

a first memory medium [108, 110, FIG. 1] for storing control codes [140, 142, 143, ..., FIG. 1];

a display means [112, FIG. 1] for displaying messages;

a receive means [118, FIG. 1] for receiving data from an external apparatus [120, FIG. 1];

a second memory medium [102, FIG. 1] for storing data [140', 142', 143', ..., FIG.1] received by said receive means;

a rewrite means [FIG. 2G; FIG. 3; steps 600-610, FIG. 6A] for rewriting control codes stored in the first memory medium (col. 3, lines 7-15; col. 5, lines 20-34);

the rewrite means obtaining rewrite execution codes [steps 612-614, FIG. 6A] from an external apparatus [120, FIG.1], and receiving the control codes [422, FIG. 6B]

from the external apparatus to rewrite the control codes in accordance with the obtained rewrite execution codes [FIG. 7A; FIG. 8A].

Whitley teaches a FAX PGM [142, 142', FIG. 1] but does not specifically teach an image forming apparatus. In addition, Whitley does not teach the display means displaying a message informing the fact that the device is under download of data into the second memory medium.

As discussed in paragraphs 5-8 above, Nagata teaches another rewrite means obtaining rewrite execution codes from an external apparatus [9, FIG. 8], and receiving control codes from the external apparatus to rewrite the control codes in accordance with the obtained rewrite execution codes for an image forming apparatus; and a display means displaying a message informing the fact that the image forming apparatus is under download of data into the second memory medium.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Whitley's teachings with Nagata's teachings because they are both directed to rewriting the control codes to a memory medium using rewrite execution codes, and Nagata's aforementioned teachings would allow the rewriting process in Whitley's teachings to be used in one of a variety of devices, and would also provide a plurality of rewriting means to the Whitley's device. The combination of Whitley's and Nagata's teachings would therefore result in a more flexible rewriting process that can be used in a variety of devices.



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11. As per claims 16-17, 19, 21, see the rejections in paragraphs 5-7 and 9-10 above.

12. As per claims 17-20, Whitley teaches the rewrite execution codes being transferred to a volatile memory medium [102, FIG. 1] and stored therein (STEP 612 and STEP 614, FIG. 6A); the rewrite execution codes including address information of the first memory medium for rewriting the control codes in accordance with the address information (col. 7, lines 43-53); a switching means [FIG. 2G; FIG.3] for exclusively changing over between an operational process [FIG. 2H] and the rewriting of the control codes (col. 3, lines 7-15; col. 5, lines 20-34); and the switching means exclusively changing over in accordance with a predetermined switch [126(6), FIG. 3].

13. As per claims 22-28, Nagata teaches an image forming apparatus and rewriting of control codes in such an apparatus (see rejections to claims 15-21 in paragraphs 10-12 above), therefore teaches the rewrite control method for such an apparatus.

14. Claims 15-17, 19, 21; 22-24, 26, 28 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagata** in view of **Knodt et al.** (U. S. Pat. No. 5,987,535).

15. The 103(a) rejections to claims 15-17, 19, 21; 22-24, 26, 28 over Nagata in paragraphs 5-8 above are incorporated by reference. **Knodt et al.** (Knodt) further teaches the desirability to present to an operator an immediate and easily recognizable

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indication of the status and capability of a given machine on a display means, the status including the current use of the machine (col. 2, lines 3-9; col. 2, lines 26-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an easily recognizable indication of the current use of a given machine on a display means in Knodt's teachings to Nagata's image forming apparatus and display means because such a combination would represent a desirable feature for Nagata's apparatus and would also make Nagata's apparatus more user friendly.

16. Claims 15-28 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over **Whitley** in view of **Nagata** and further in view of **Knodt**.

17. The 103(a) rejections to claims 15-28 over Whitley in view of Nagata in paragraphs 9-13 above are incorporated by reference. **Knodt et al.** (Knodt) further teaches the desirability to present to an operator an immediate and easily recognizable indication of the status and capability of a given machine on a display means, the status including the current use of the machine (col. 2, lines 3-9; col. 2, lines 26-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an easily recognizable indication of the current use of a given machine on a display means in Knodt's teachings to Whitley's/Nagata's image forming apparatus and display means because such a combination would represent a desirable feature for Whitley's/Nagata's apparatus and would also make Whitley's/Nagata's apparatus more user friendly.

***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (703) 305-0138, and whose e-mail address is [tanh.nguyen36@uspto.gov](mailto:tanh.nguyen36@uspto.gov). The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee, can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-5404.

Any inquiry of a general nature relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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Mail responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Faxes for formal communications intended for entry should be sent to:

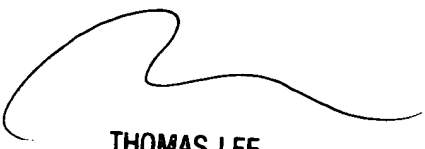
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Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, Va, Sixth Floor receptionist.



THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
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TQN

July 11, 2001